

# (12) United States Patent

## **Cumming**

## US 7,985,253 B2 (10) **Patent No.:**

## (45) **Date of Patent:**

\*Jul. 26, 2011

### (54) HYDROLIC ACCOMMODATING INTRAOCULAR LENS

(75) Inventor: J. Stuart Cumming, Laguna Beach, CA

(US)

Assignee: C&C Vision International Limited,

Dublin (IE)

Subject to any disclaimer, the term of this Notice:

patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-

claimer.

- (21) Appl. No.: 11/924,485
- Oct. 25, 2007 (22)Filed:
- (65)**Prior Publication Data**

US 2008/0269887 A1 Oct. 30, 2008

## Related U.S. Application Data

- Continuation-in-part of application No. 11/458,886, filed on Jul. 20, 2006, which is a continuation-in-part of application No. 11/297,232, filed on Dec. 7, 2005, now abandoned.
- (51) Int. Cl.

A61F 2/16 (2006.01)

- **U.S. Cl.** ...... **623/6.13**; 623/6.34; 623/6.44; (52)
- (58) **Field of Classification Search** ....................... 623/6.13, 623/6.32, 6.34, 6.37, 6.44 See application file for complete search history.

(56)**References Cited** 

## U.S. PATENT DOCUMENTS

4,174,543 A	11/1979	Kelman
4,244,060 A	1/1981	Hoffer
4,254,509 A	3/1981	Tennant
4.254.510 A	3/1981	Tennant

4,298,996 A	11/1981	Barnet
4,304,012 A	12/1981	Richard
4,409,691 A	10/1983	Levy
4,424,597 A	1/1984	Schlegel
4,441,217 A	4/1984	Cozean, Jr.
4,477,931 A	10/1984	Kelman
4,573,998 A	3/1986	Mazzocco
4,585,457 A	4/1986	Kalb
4,605,411 A	8/1986	Fedorov et al.
4,629,462 A	12/1986	Feaster
4,664,666 A	5/1987	Barrett
4,673,406 A	6/1987	Schlegel
4,704,123 A	11/1987	Smith
4,718,904 A	1/1988	Thornton
4,738,680 A	4/1988	Herman
4,753,655 A	6/1988	Hecht
, ,	(C	·!
(Continued)		

#### FOREIGN PATENT DOCUMENTS

EP 0208546 A 1/1987 (Continued)

## OTHER PUBLICATIONS

Archimede Busacca, Ciliary Muscle Physiology Studied by Gonioscopy, Annals of Oculistics, vol. CLXXXVIII, Jan. 1955 (English Translation), 13 pages.

(Continued)

Primary Examiner — David H. Willse

(74) Attorney, Agent, or Firm - Orrick, Herrington & Sutcliffe LLP

#### (57)ABSTRACT

An accommodating intraocular lens comprising an optic made from solid silicone and liquid silicone. The optic has a central anterior area or membrane that can vary in radius and thus charge power.

## 35 Claims, 8 Drawing Sheets

